Note: This is version 2 of the topics document on entity types representing the **status as of** the EAC-CPF team meeting on **5 June 2020**. <u>Version 1</u>, which includes some more background information with regard to conversations held before that date, remains accessible as "View only" for reference.

Enabling variations in encoding the type of the described entity

Status after the Berlin meeting

Status after the EAC-CPF meeting on 5 June

Options for encoding the entity type

Options for wrapper element(s)

Pending decision

Grouping elements in general

Grouping entity types

Recommendation

Rationale behind recommendation

Potential alternative to the above recommendation

Decision during the EAC-CPF meeting on 3 July

Status after the Berlin meeting

While the details were still to be finalised, the following general decisions were taken during the Berlin meeting and reconfirmed afterwards:

- There would be one element, <entitytype>, using standardised values for the type of entity being described for reasons of interoperability.
- <entitytype> would follow the content model of the elements <agenttype>, <eventtype>, <maintenancestatus>, and <publicationstatus>, i.e.:
 - o It would use the attribute @value to provide these standardised values;
 - It would not be repeatable;

- o It would not have the option to include content in the element itself;
- o It would hence not be using any language attribution.
- The list of predefined values would remain as is for the time being, i.e. use the valued "corporateBody", "person", "family".

```
<entitytype value="corporateBody"/>
```

- There would be an additional element that would enable users to include their own types of entities, e.g.:
 - As translations of the standardised terms:
 - As alternatives or more specific terms;
 - With an option to point to an ontology for these terms;
 - With an option to define the relationship of the local term to the standardised terms.

Status after the EAC-CPF meeting on 5 June

During the meeting three options to encode the type of an entity were presented and discussed and the team members present at the meeting agreed with the recommendation to follow option 1. This meant to:

- Keep <entitytype> as an element;
- Have <entitytype> as mandatory, not repeatable sub-element of <identity>;
- Do NOT allow content within <entitytype>;
- Use the required attribute @value to specify whether the type of entity is "corporateBody", "person", "family";
- Use the general optional attributes @id, @audience;
- Use the optional attributes @valueuri, @vocabularysource, @vocabularysourceuri for pointing to an ontology, vocabulary or other means of defining/identifying the terms used.

In addition, the decision was taken to name the element for users' own types of entities **other**entitytype>. This would be used with:

- The general optional attributes @id, @audience;
- The optional attributes for language attribution, i.e. @languageofelement, @scriptofelement, @transliteration;
- Use the optional attributes @valueuri, @vocabularysource, @vocabularysourceuri for pointing to an ontology, vocabulary or other means of defining/identifying the terms used;
- Use the optional attribute @localtype to identify an <otherentitytype> as being a translation, abbreviation, specification, etc.

The table below only shows the chosen option 1, updated to the decisions of 5 June.

Options for encoding the entity type

Option 1

Keep <entitytype> as mandatory and not repeatable (1)

Only with the @value attribute

Without having content itself

Use <otherentitytype> to provide translations as well as other alternative types

```
<identity>
[...]
<entitytype value="corporateBody"/>
[...]
<otherentitytype languageofelement="eng" localType="RiCThirdLevel">
Group</otherentitytype>
<otherentitytype languageofelement="eng" localType="RiCSecondLevel">
Agent</otherentitytype>
<otherentitytype languageofelement="ger" localType="translation" vocabularysource="GND"</pre>
vocabularysourceuri="http://d-nb.info/gnd/" valueuri="http://d-nb.info/gnd/4128521-9">
Körperschaft</otherentitytype>
<otherentitytype languageofelement="fre" localType="translation" vocabularysource="RAMEAU"</pre>
vocabularysourceuri="https://data.bnf.fr/" valueuri="https://data.bnf.fr/ark:/12148/cb11951020r">
Organisation</otherentitytype>
<otherentitytype languageofelement="ger" localType="specification" vocabularysource="GND"</pre>
vocabularysourceuri="http://d-nb.info/qnd/" valueuri="http://d-nb.info/qnd/4187548-5">
Verbandskörperschaft</otherentitytype>
[...]
</identity>
```

Options for wrapper element(s)

The EAC-CPF team also discussed options for (a) potential wrapper element(s) for the types of entity as well as for the related element <identityid>. No final decision was taken, but two new, respectively extended, options were suggested.

With regard to the element <identityid> itself, the following was agreed:

- Use the general optional attributes @id, @audience;
- Use the optional attributes for language attribution, i.e. @languageofelement, @scriptofelement, @transliteration;
- Possibly use the optional attributes @valueuri, @vocabularysource, @vocabularysourceuri for pointing to an ontology, vocabulary or other means of defining/identifying the terms used;
- Use the optional attribute @localtype;
- Keep the element as repeatable (the question of optional or mandatory will depend on the context).

Pending decision

The initial suggestion following issue #44 had been to create a new wrapper element <entitytypedeclaration> that would include <entitytype> and - now - <otherentitytype>. During the Berlin meeting the point was made that <*declaration> elements, so far, are only used within the <control> section and that we might want to look at other options.

Grouping elements in general

Within EAC-CPF (and EAD3) there are currently three different types of wrapping elements that enable the user to group elements of same or of related kinds:

- Plural elements;
 - Only used in EAC-CPF (with the exception of <relations>);
 - <functions>, <languagesUsed>, <legalStatuses>, <localdescriptions>, <mandates>, <occupations>, <places>;
 - Include a singular version of themselves, i.e. <function>, <languageUsed>, <legalStatus>, <localdescription>, <mandate>,
 <occupation>, <place> (and <relation>);
 - Are optional and not repeatable;
 - Currently used with the additional descriptive sub-elements <descriptiveNote>, <citation>, , , <outline> (see #61).

<*set> elements:

- Used in both standards:
- Can have properties of their own, such as @coverage on <physdescset> and <daoset>, i.e. "they not only bundle two or more similar concepts, but that they represent series of statements that as a group have meaning";
- Include either one repeatable sub-element (<alternativeSet> with <setComponent>, <daoset> with <dao>, <physdescset> with <physdescstructured>) or a combination of two (mostly) repeatable sub-elements (<dateSet> with <date> and <dateRange>, <chronitemset> with <event> and <geogname>, <languageset> with <language> and <script>, <nameEntrySet> with <nameEntry> and <useDates>);
- Are optional and mostly repeatable; exceptions are <alternativeSet>, which is not repeatable, and <dateSet> where it depends
 on the context;
- Only <daoset> and <languageset> include additional descriptive sub-elements and both only include <descriptivenote>.

<*grp> elements;

- Only used in EAD3;
- o <namegrp>, <ptrgrp>;
- Include several repeatable sub-elements (all access elements for <namegrp>, <ptr> and <ref> for <ptrgrp>)
- Are optional and not repeatable;
- o Do not include any additional descriptive sub-elements.

Leaving the <*grp> elements aside, as these are rather a remnant of EAD 2002 and EAD3 itself already changed e.g. <daogrp> to <daoset>, it seems that the general differences between the two other options are:

- Plural elements group repeated instances of the same element in singular form, while <*set> elements group one or more similar and related elements.
- Plural elements allow currently for a wide variety of descriptive information to be added, while <*set> elements can have properties of their own, but are mostly not described in any more detail themselves.

Grouping entity types

Option 1	Option 2	Option 3
		Given the different scope of entity types and identity IDs, it might be worth considering a mix of options 1 and 2:
Have one new wrapper element <pre><entitytypeset> as sub-element of <identity></identity></entitytypeset></pre> Includes the mandatory, not repeatable	Have two new wrapper elements, <otherentitytypes> and <identityids> as sub-elements of <identity></identity></identityids></otherentitytypes>	Have two new wrapper elements, <otherentitytypes> and <identityidset> as sub-elements of <identity></identity></identityidset></otherentitytypes>
sub-element <entitytype> and the optional , repeatable sub-element <otherentitytype></otherentitytype></entitytype>	Include singular version of themselves, i.e. <pre><otherentitytype> and <identityid></identityid></otherentitytype></pre>	While the first includes a singular version of itself, i.e. < other entitytype>, the latter
With the sub-element <entitytype> being mandatory, <entitytypeset> itself would need</entitytypeset></entitytype>	<oh> otherentitytypes> and <identityids> could</identityids> both be optional and would, if used, both </oh>	includes the mandatory and repeatable sub-element <identityid></identityid>
to be mandatory, too Have a second new wrapper element <identityidset> as sub-element of <identity></identity></identityidset>	require to use at least one singular version of themselves In this scenario, <otherentitytype> and</otherentitytype>	<pre><otherentitytypes> and <identityidset> could both be optional and would, if used, both require to use at least one sub-element</identityidset></otherentitytypes></pre>
Includes the mandatory and repeatable sub-element <identityid></identityid>	identityid> would follow the same content model as other singular elements, i.e. they would include the sub-element, which would	<pre><otherentitytype> would follow the same content model as other singular elements, i.e. it would include the sub-element <term>,</term></otherentitytype></pre>
<identityidset> itself would be optional</identityidset>	then have the appropriate attributes of	which would then have the appropriate
It might be suitable to allow <descriptivenote> with <entitytypeset> (i.e. similar to <daoset> and <languageset>), while <identityidset> can possibly do without additional descriptive elements</identityidset></languageset></daoset></entitytypeset></descriptivenote>	@valueuri, @vocabularysource, @vocabularysourceuri instead	attributes of @valueuri, @vocabularysource, @vocabularysourceuri instead

<identity></identity>	<identity></identity>	<identity></identity>
<pre><entitytypeset></entitytypeset></pre>		
<pre><entitytype value="corporateBody"></entitytype></pre>	<pre><entitytype value="corporatebody"></entitytype></pre>	<pre><entitytype value="corporatebody"></entitytype></pre>
	<pre><otherentitytypes></otherentitytypes></pre>	<pre><otherentitytypes></otherentitytypes></pre>
<pre><otherentitytype< pre=""></otherentitytype<></pre>	<otherentitytype></otherentitytype>	<pre><otherentitytype></otherentitytype></pre>
languageofelement="ger"	<term <="" languageofelement="ger" td=""><td><pre><term <="" languageofelement="ger" pre=""></term></pre></td></term>	<pre><term <="" languageofelement="ger" pre=""></term></pre>
localType="translation"	localType="translation"	localType="translation"
vocabularysource="GND"	vocabularysource="GND"	vocabularysource="GND"
vocabularysourceuri="http://d-nb.info	vocabularysourceuri="http://d-nb.info	vocabularysourceuri="http://d-nb.info
/gnd/"	/gnd/"	/gnd/"
valueuri="http://d-nb.info/gnd/412852	valueuri="http://d-nb.info/gnd/412852	valueuri="http://d-nb.info/gnd/412852
1-9">	1-9">	1-9">
Körperschaft	Körperschaft	Körperschaft
<pre><otherentitytype< pre=""></otherentitytype<></pre>	<otherentitytype></otherentitytype>	<pre><otherentitytype></otherentitytype></pre>
languageofelement="fre"	<term <="" languageofelement="fre" td=""><td><pre><term <="" languageofelement="fre" pre=""></term></pre></td></term>	<pre><term <="" languageofelement="fre" pre=""></term></pre>
localType="translation"	localType="translation"	localType="translation"
vocabularysource="RAMEAU"	vocabularysource="RAMEAU"	vocabularysource="RAMEAU"
vocabularysourceuri="https://data.bnf	vocabularysourceuri="https://data.bnf	vocabularysourceuri="https://data.bnf
.fr/"	.fr/"	.fr/"
valueuri="https://data.bnf.fr/ark:/12	valueuri="https://data.bnf.fr/ark:/12	valueuri="https://data.bnf.fr/ark:/12
148/cb11951020r">	148/cb11951020r">	148/cb11951020r">
Organisation	Organisation	Organisation
	<descriptivenote></descriptivenote>	<descriptivenote></descriptivenote>
	Some text explaining the use of	Some text explaining the use of
	the French term.	the French term.
<pre><otherentitytype< pre=""></otherentitytype<></pre>	<otherentitytype></otherentitytype>	<otherentitytype></otherentitytype>
languageofelement="ger"	<pre><term <="" languageofelement="ger" pre=""></term></pre>	<pre><term <="" languageofelement="ger" pre=""></term></pre>
localType="specification"	localType="specification"	localType="specification"
vocabularysource="GND"	vocabularysource="GND"	vocabularysource="GND"

vocabularysourceuri="http://d-nb.info	vocabularysourceuri="http://d-nb.info	vocabularysourceuri="http://d-nb.info
/gnd/"	/gnd/"	/gnd/"
valueuri="http://d-nb.info/gnd/418754	valueuri="http://d-nb.info/gnd/418754	valueuri="http://d-nb.info/gnd/418754
8-5">	8-5">	8-5">
Verbandskörperschaft	Verbandskörperschaft	Verbandskörperschaft
[]	[]	[]
<descriptivenote></descriptivenote>	<descriptivenote></descriptivenote>	<descriptivenote></descriptivenote>
Some text explaining the	Some text explaining the	Some text explaining the
connection to the other entity	connection to the other entity	connection to the other entity
types.	types.	types.
<identityidset></identityidset>	<identityids></identityids>	<identityidset></identityidset>
<identityid< td=""><td><identityid< td=""><td><identityid< td=""></identityid<></td></identityid<></td></identityid<>	<identityid< td=""><td><identityid< td=""></identityid<></td></identityid<>	<identityid< td=""></identityid<>
localtype="drivingLicence">	localtype="drivingLicence">	localtype="drivingLicence">
0815	<term>0815</term>	0815
	<placeentry>West</placeentry>	
	<date>1915</date>	
<identityid localtype="passport"></identityid>	<identityid localtype="passport"></identityid>	<identityid localtype="passport"></identityid>
ABCD	<term>ABCD</term>	ABCD
	<pre><placeentry>East</placeentry></pre>	
	<date>1908</date>	
	<descriptivenote></descriptivenote>	
	Some text providing more	
	information about the identity	
	IDs.	

Recommendation

Follow option 3, i.e.:

- Introduce two new wrapper elements, <otherentitytypes> and <identityidsset>, within <identity>;
- Have both of these elements as optional and not repeatable;
- Have both of these elements require at least one of their individual sub-elements, <otherentitytype> and <identityid> respectively;
- Have <otherentitytypes> follow the same content model as other plural elements -> to be decided in a more general conversation around plural elements;
- Have <identityset> function as a grouping element mainly;
- Have both of these elements with the general optional attributes @id, @audience;
- Have both of these element with the optional attributes for language attribution, i.e. @languageofelement, @scriptofelement, @transliteration.

Rationale behind recommendation

With entity types ideally coming from ontologies, vocabularies, thesauri, etc., it seems suitable to use <otherentitytype> with <term> similar to other elements that are meant to point to such external resources. For <identityid>, however, this model seems a little too complex given the mostly straightforward scope of the element. Hence the model of <*set> elements to group several <identityid>-s together, where applicable, seems a better fit.

Potential alternative to the above recommendation

Following the above rationale and keeping the simpler model for <identityid>-s, it might be an alternative to the recommendation to have <otherentitytype>-s follow the same approach in order to use the same content model for sub-elements of <identity>. This would then also fall in line with the other sub-element of <identity>, the <nameentry> respectively <nameentryset>, whereas the plural/singular model would then only be used with sub-elements of <description>. Should option 3 not be chosen, option 1 could hence be a possible variant.

Option 3 extended

Have one new wrapper element, <otherentitytypes>, as sub-element of <identity>

Have <otherentitytypes> as optional and requiring at least one singular version of itself, i.e. <otherentitytype>

Have **other**entitytype> follow the same content model as other singular elements, i.e. it would include the sub-element **term**, which would then have the appropriate attributes of @valueuri, @vocabularysource, @vocabularysourceuri

Keep <identityid> as single, repeatable element within <identity>

```
<identity>
 <entitytype value="corporatebody"/>
 <otherentitytypes>
   <otherentitytype>
      <term languageofelement="ger" localType="translation" vocabularysource="GND"</pre>
     vocabularysourceuri="http://d-nb.info/qnd/" valueuri="http://d-nb.info/qnd/4128521-9">
      Körperschaft</term>
   </otherentitytype>
   <otherentitytype>
      <term languageofelement="fre" localType="translation" vocabularysource="RAMEAU"</pre>
     vocabularysourceuri="https://data.bnf.fr/" valueuri="https://data.bnf.fr/ark:/12148/cb11951020r">
     Organisation</term>
     <descriptivenote>
        Some text explaining the use of the French term.
     </descriptivenote>
   </otherentitytype>
    <otherentitytype>
      <term languageofelement="ger" localType="specification" vocabularysource="GND"</pre>
     vocabularysourceuri="http://d-nb.info/qnd/" valueuri="http://d-nb.info/qnd/4187548-5">
     Verbandskörperschaft</term>
```

```
</otherentitytype>
[...]
  <descriptivenote>
      Some text explaining the connection to the other entity types.
      </descriptivenote>
      </otherentitytypes>
      <identityid localtype="registrationnumber">0815</identityid>
      <identityid localtype="taxnumberFrance">ABCD</identityid>
      <identityid localtype="taxnumberFrance">EFGH</identityid>
      </identityid localtype="taxnumberSpain">EFGH</identityid>
    </identity>
```